Technological diversity: A case study into language learners' mobile technology use inside and outside the classroom

Brick, B. and Cervi-Wilson, T.

Published by Research-publishing.net, not-for-profit association
Dublin, Ireland; Voillans, France, info@research-publishing.net

10 years of the LLAS elearning symposium: case studies in good practice
Edited by Kate Borthwick, Erika Corradini, & Alison Dickens

Typeset by Research-publishing.net
Cover design and frog picture by Raphaël Savina
Illustration of the retro-themed birthday greetings (id# 129712892) by "© Hermin/www.shutterstock.com"

ISBN13: 978-1-908416-22-3 (Paperback - Print on demand, black and white)
Print on demand technology is a high-quality, innovative and ecological printing method; with which the book is never 'out of stock' or 'out of print'.

ISBN13: 978-1-908416-23-0 (Ebook, PDF, colour)
ISBN13: 978-1-908416-24-7 (Ebook, EPUB, colour)

Legal deposit, Ireland: The National Library of Ireland, The Library of Trinity College, The Library of the University of Limerick, The Library of Dublin City University, The Library of NUI Cork, The Library of NUI Maynooth, The Library of University College Dublin, The Library of NUI Galway.

Legal deposit, United Kingdom: The British Library.
British Library Cataloguing-in-Publication Data.
A cataloguing record for this book is available from the British Library.

Legal deposit, France: Bibliothèque Nationale de France - Dépôt légal: janvier 2015.

2 Technological diversity: A case study into language learners' mobile technology use inside and outside the classroom

Billy Brick[1] and Tiziana Cervi-Wilson[2]

Abstract

The speed of technological advance in the mobile phone, netbook and tablet markets has meant that learners increasingly have access to digital devices capable of enhancing their learning experience. This case study reports on how language learners, taking Italian as an option on the Institution Wide Languages Programme (IWLP) at Coventry University, use their digital devices to support their language learning. Foreign language educators in higher education need to be aware of the degree to which learners utilise their digital devices and what they use them for. This knowledge will allow tutors to be able to offer help and support. Learners were observed using their devices in the classroom and were asked to complete a detailed questionnaire. More detailed data was then collected from a focus group of students reflecting on the numerous ways in which they used their phones to support their language learning. The case study found that the use of digital devices to support language learning was widespread and often took place outside the classroom. It also revealed that tutors were unable to recommend appropriate apps and that learners tended to use their devices autonomously and unintegrated with their modules. Learners expressed a desire for the integration of mobile language learning resources with their existing course books and on-line learning materials.

Keywords: MALL, Italian, digital devices, language learning, smartphones, apps.

1. Coventry University, Coventry, United Kingdom; lsx133@coventry.ac.uk.

2. Coventry University, Coventry, United Kingdom; lsx091@coventry.ac.uk.

How to cite this chapter: Brick, B., & Cervi-Wilson, T. (2015). Technological diversity: A case study into language learners' mobile technology use inside and outside the classroom. In K. Borthwick, E. Corradini, & A. Dickens (Eds), *10 years of the LLAS elearning symposium: Case studies in good practice* (pp. 21-30). Dublin: Research-publishing.net. doi:10.14705/rpnet.2015.000264

1. Context/rationale

Digital devices have become increasingly indispensable artefacts in modern society and people's dependence on them has increased accordingly. More recently, the advent of smart phones, with the ability to connect to the internet, has added a number of additional computing capabilities to the basic function of telephony. Thanks to these new functions, smart phones have become powerful mobile learning devices, sharing many educational applications with computers. Furthermore, for reasons of convenience, mobile phones are even more effective than computers in the Web 2.0 context, allowing users to create, share and disseminate knowledge. In this context, pedagogical concerns have arisen regarding when and where it is appropriate to use mobile phones, not least within universities. Tutors may disagree on mobile device campus usage policy but most would agree that mobile devices have the potential to distract and disrupt.

There were two distinct contexts to the study: how learners utilise their digital devices inside the classroom in formal settings, and how they use them informally outside the classroom. This approach mirrors Kukulska-Hulmes's (2012) study which concluded that:

> "time and place are becoming more prominent in shaping the landscape of language learning as learning intertwines with their daily life activity and work. I have sought to look beyond the "anytime, anywhere" mantra to discover the specifics of time and place, enabling the formulation of some key questions and choices that can be used to interrogate and develop future designs for mobile language learning" (pp. 10-11).

At Coventry University, mobile phone usage in lectures is not permitted, but their role in the language classroom is more ambiguous due to the potential affordances they provide in language learning contexts. One of the main attractions for incorporating mobile phones in the classroom is that apps can be used in tandem within class curriculum in order to help students understand complex linguistic structures. In fact, one of the motivations for carrying out

the study came from one of the researcher's continual observations of learners surreptitiously using their devices during class. This observation ignited a desire to capture more in depth data regarding digital device usage inside and outside the classroom. The researchers attempted to establish whether learners were utilising their devices as portable dictionaries or whether they exploited them in a more sophisticated way. In addition, data was collected regarding the specific use of their devices outside the classroom in autonomous settings.

One difficulty encountered by the researchers, which was also apparent during the classroom observations and in the focus group, concerned the definition of the term 'app'. During discussions with learners it became clear that they were not always aware if they were accessing their learning material via an app, or via either a smartphone-optimised website, or the original designed-for-PC or laptop website. Indeed, the distinctions between these can be subtle and not always immediately obvious. If the Guardian Newspaper is taken as an example, the complex nature of the way in which a website can be viewed can be further clarified (see Table 1).

Table 1. The various ways of viewing the Guardian Newspaper

Name of App	Specific Features	Availability Offline	Cost
Guardian and Observer iPad Edition	Specifically designed for use on the iPad. Requires iOS5	Yes	Subscription
The Guardian for iPhone and iPad	Specifically designed for use on the iPhone but will also work on the iPad 3	Yes	Free
Guardian Kindle Edition	Available for all Kindles	Yes	Subscription
Guardian Blackberry 10 App	Available for one specific Blackberry phone	Yes	Free
Guardian Android App	Free download for Android devices	Yes	Free
Guardian Mobile Site	Guardian main website optimized for use on mobile devices	Yes	Free
Guardian Windows App	App for use on Windows phones	Yes	Free

Table 1 serves to illustrate that questions focussing specifically on apps could have been slightly misconstrued or misunderstood by participants. Most major websites now have a plethora of mobile apps similar to the Guardian's, which may be confusing.

A recent study by Simon and Fell (2012) found that 60% of foreign language students used their smart phones for language learning purposes. Mobile devices are at the forefront of recent developments in language learning with a plethora of third party apps available from the two main companies: Android and Apple. A search for language learning apps on these online stores produces hundreds of results ranging from full language courses to tourist phrase books, dictionaries and flash cards (for a thorough explanation of the variety of apps available see Godwin-Jones, 2011). Many of these apps are free of charge and others cost up to 10 USD depending on their perceived value. Some companies give their apps away for free if the consumer has already subscribed to their online offer whilst others use the 'Freemium' model to sell their apps. This large choice of apps can be explained by a significant increase in demand for language learning from developing countries where learning a language can have significant impact on employment and trade (Kukulska-Hulme, 2012).

Yet few studies have investigated students' personal use of language learning mobile apps and the learning benefits students perceive they bring. Indeed most research into mobile learning in university settings has tended to focus on teacher-led mobile initiatives. Although there are apps for all aspects of language learning, very little consideration has been given to the pedagogical premises that underpin the design of mobile apps.

2. Aims and objectives

This case study involved a sample of 175 learners across three year groups. It captured detailed data regarding the devices owned, specific apps, as well as other features learners accessed in order to facilitate their learning. It also recorded learners' views regarding the support and advice they expected to receive from

their tutors. The purpose of this research was to answer the question: 'how do language learners use their mobile devices to support their language learning?' More specifically, the research had three objectives:

- to establish the specific ways in which users use their digital devices inside and outside the classroom;
- to establish which specific sites and apps they access;
- to explore the ways in which learners would like to use their digital devices.

3. What we did

The participants in the project were 175 undergraduate learners, 68.1% were from the UK, 13.2% were from Romania and the rest were from various L1 backgrounds. All of the students were taking Italian at levels 1, 2 and 3 on the IWLP between October 2011 and April 2012. 71% of the participants were taking a beginners' level module. At Coventry University all IWLP provision is organised by the Department of English and Languages, and falls within a compulsory 10 credit employability scheme called Add+vantage Coventry University. The scheme, launched in October 2006, is unique and has greatly increased IWLP provision across the University. These students were studying a variety of different degree programmes across the University.

In the first part of the study, learners were observed using their digital devices in the classroom and were asked to explain how they were using them to support their language learning. They were also asked to complete a three-part, online questionnaire which was administered in class. Most of the learners already had some experience of language learning technologies incorporated in university-style learning and teaching. The first section asked learners to indicate the devices they owned and to state how, when and where they used them. The second section then aimed to gain an understanding of the

frequency with which they used their devices. Learners had to rate questions on a five-point Likert scale, in order to capture data referring to specific usage of their devices in the four skills of reading, writing, speaking and listening. Finally, learners were invited to explain how they used their devices to access dictionaries, translation-sites, thesauruses and other Italian language learning sites. To triangulate the study, semi-structured interviews were carried out with a sample of the participants, in which more detailed questions were posed. Both researchers were always present as a means of cross-checking and producing a more complete record. Of the 175 participants who completed the online survey, 10 took part in the focus groups. The distribution of gender was skewed towards females, with 61% females, and 39% males. Because all of the participants were studying on the University-wide languages programme, only 20% were studying languages as their main degree; the vast majority (80%) were not specialist language learners. The interviews were semi-structured and took place over a period of two weeks following the completion of the questionnaires.

The following section is a summary of the questionnaires and evaluations collected from the participants both in the classroom and via classroom observations. The combination of regular dialogue and discussion with the students, and questionnaire data and focus group observations, provided a diverse variety of data covering a wide range of opinions about their usage of their devices.

4. Discussion

Learners at all levels were surveyed, but as is the case on all IWLPs, the overwhelming majority (62%) were learning Italian at beginners level. However, there was no evidence to suggest that this affected the overall outcome of the research. 78% of our sample stated that they owned a digital device and of these, 69% owned either an Apple, Blackberry or HTC device. In terms of operating systems, they were equally divided between Apple, Android and Research in Motion (RIM).

Just over 22.3% of respondents stated that they used their digital devices to access online dictionaries with the most popular being WordReference. However, many chose not to use a dictionary at all and instead opted for online translators, overwhelmingly Google Translate. The respondents who took part in the focus group stated unanimously that they would like advice from their tutors regarding which online dictionary was most suitable for learners at their level. This is not surprising given the large number of free-to-use electronic dictionaries available. However, perhaps it is unrealistic to expect tutors to have the time or expertise to recommend specific dictionaries. This is particularly apposite in Coventry University's context where language learning modules are taught two hours per week over ten weeks and two of these weeks are dedicated to assessment. In this context, tuition in dictionary use is not a high priority. In spite of this, there was a clear desire from the focus group and from individuals during the classroom observations for tutors to be aware of the various language specific apps so that they can offer appropriate advice to learners.

Only 17% either agreed or strongly agreed that they used their devices to practice their listening skills whilst the figure for writing was 20%. In the focus group, several respondents stated that they downloaded the mp3 files associated with their course book onto their digital devices and this was actively encouraged by their tutor. The researchers did not establish whether those who responded positively to the writing question, wrote on their phones, tablets or on laptops. Some of the focus group participants mentioned screen size as a factor which discouraged them from writing on their digital devices.

Learners were also asked whether or not they used their devices to look up the meanings and spellings of words. The question did not seek to ascertain whether they used bilingual dictionaries, multilingual dictionaries or online translation programmes such as Google Translate. 64% either agreed or strongly agreed whilst 30% stated that they disagreed or strongly disagreed with the statement. This is clear evidence that a large proportion of learners are using their digital devices to find out the meaning of words. Observations in the classroom demonstrate that learners are choosing to use their devices for looking up the meanings of words rather than using traditional paper dictionaries.

Only 53% of the participants either agreed or strongly agreed that they took full advantage of digital technologies to support their language learning. This suggests that there is considerable scope to teach learners the ways in which they could integrate their mobile devices into their language learning.

The important issue concerning the responsibility of tutors in the age of Web 2.0 was highlighted by Conole and Alevizou (2010) who wrote that "the boundaries between traditional roles (teacher and learner) and functions (teaching and learning) are blurring. 'Teachers' need to be learners in order to make sense of and take account of new technologies in their practices" (p. 44). However, the fast changing nature of technology and increasing pressures on staff time may be obstacles to staff development and training in these areas.

Furthermore, 58% of learners used an online dictionary or translator. When asked to specify the name of their favoured translator, nearly 82% stated that they used Google Translate. Participants in the focus group suggested that Google Translate was used in a similar way to a dictionary: to find out the meanings of individual words. Interestingly, the majority of the focus group participants were unable to make a distinction between an online translator and an online dictionary. This is perhaps understandable given that 80% of the participants were not language specialists.

The revelation that learners relied on the rating system used on Apple, Android and Blackberry app sites rather than advice from tutors, suggests that there is some scope for teacher training in this area. There are very few practitioners' websites available where language learning apps are categorised and evaluated with the notable exception of The University of Colorado Boulder, where both free and paid-for multi-language and language specific apps are recommended along with other language learning resources.

Participants in the focus group voiced a strong desire to have a dedicated app for their language learning module which synced with their virtual learning environment, but this sort of integrated approach across printed and digital resources is still some way from being realised.

5. Conclusion

In this case study, it has been argued that participants are using their smart phones and digital devices in a wide range of contexts to support their language learning both inside and outside the classroom.

Ongoing technological change will continue to be a challenge to researchers as innovation in the phone market shows no sign of abating. This may offer new possibilities and open new avenues for researchers in this field. Educational practitioners will have to continue developing frameworks to optimise mobile learning and their efforts will continue to be challenged by technological change.

The study highlights the need for practitioners to be aware of the ever-changing technological landscape so that they are able to recommend suitable technologies to optimise the use of technology in language learning. It is difficult to see how mobile-assisted language learning can avoid the pitfalls that have affected CALL, namely that research has tended to follow technological innovations rather than vice versa. Our study clearly shows that practitioners need to be actively involved in the affordances offered by mobile devices, if they wish to be able to offer up-to-date advice to their learners. One of the key points highlighted throughout our study is the extent to which learners are using their mobile devices without concomitant support offered by practitioners. Hence, suitable resources need to be made available to equip practitioners with the necessary skills to offer advice to enhance students' language learning experience in the mobile environment. Another approach, which also addresses the digital literacy agenda, would be to engage learners in evaluation tasks, such as evaluating the affordances of websites and apps or rating such sites themselves.

References

Conole, G., & Alevizou, P. (2010). *A literature review of the use of Web 2.0 tools in higher education*. Higher Education Academy. Retrieved from https://www.heacademy.ac.uk/sites/default/files/Conole_Alevizou_2010.pdf

Godwin-Jones, R. (2011). *Emerging technologies. Mobile Apps for Language Learning. Language Learning & Technology, 15*(2), 2-11. Retrieved from http://llt.msu.edu/issues/june2011/emerging.pdf

Kukulska-Hulme, A. (2012). Language learning defined by time and place: A framework for next generation designs. In J. E. Díaz-Vera (Ed.), *Left to My Own Devices: Learner Autonomy and Mobile Assisted Language Learning. Innovation and Leadership in English Language Teaching, 6* (pp. 1-13). Bingley, UK: Emerald Group Publishing Limited. Retrieved from http://oro.open.ac.uk/30756/1/AKH_Emerald_chapter_FINAL.pdf

Simon, E. F., & Fell, C. P. (2012, June 6). Using mobile learning resources in foreign language instruction. *Educause Review Online*. Retrieved from http://www.educause.edu/ero/article/using-mobile-learning-resources-foreign-language-instruction